

Alternative Interface Access Protocols (AIAP)

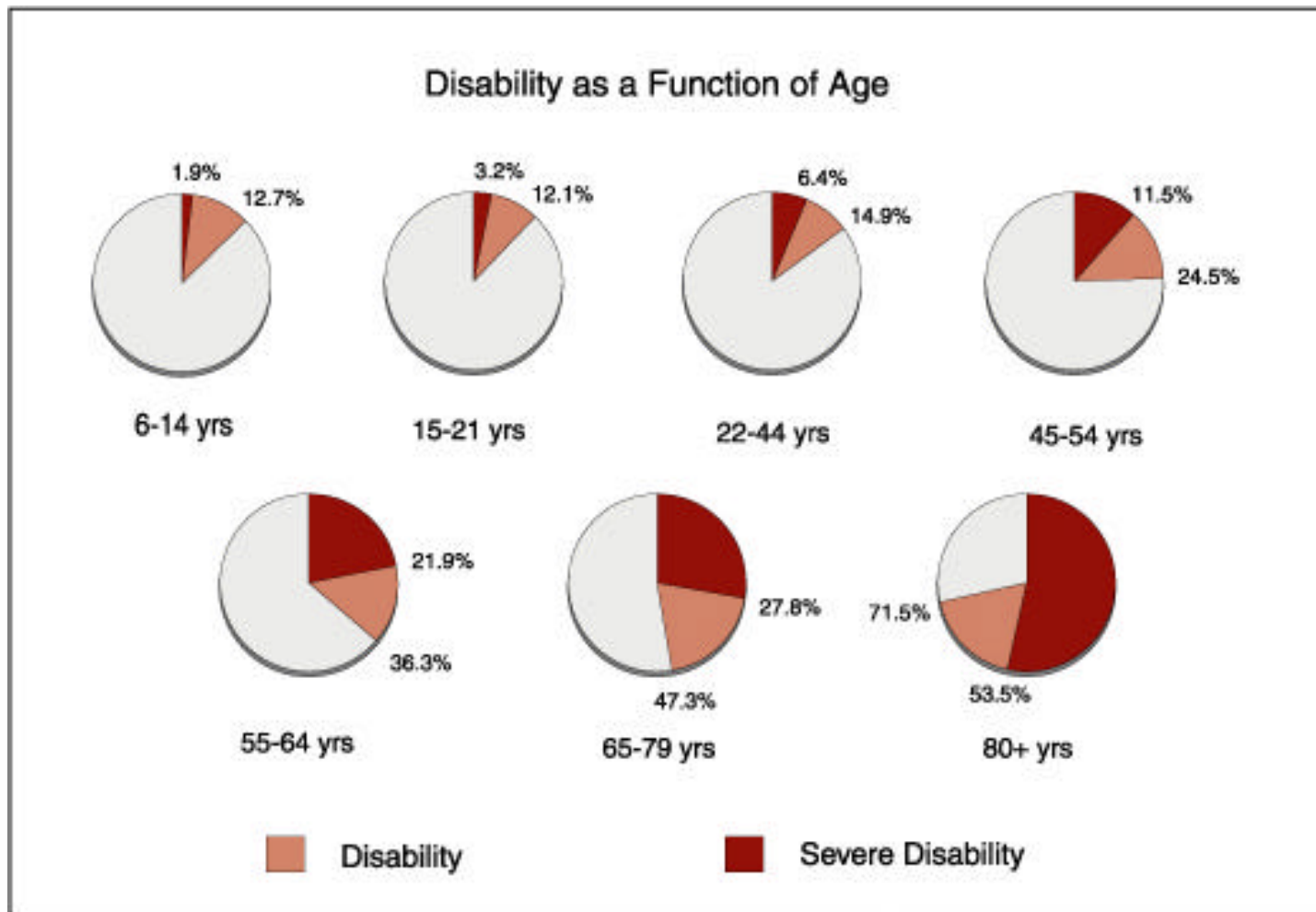
Controlling Next Generation Technologies by
Alternative User Interfaces



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Functional Limitations as a Function of Age



Source: U.S. Census Bureau Report on Americans with Disabilities: 1994-95, P70-61 (August 1997)
Based on Survey of Income and Program Participation, Oct. 1994-Jan. 1995

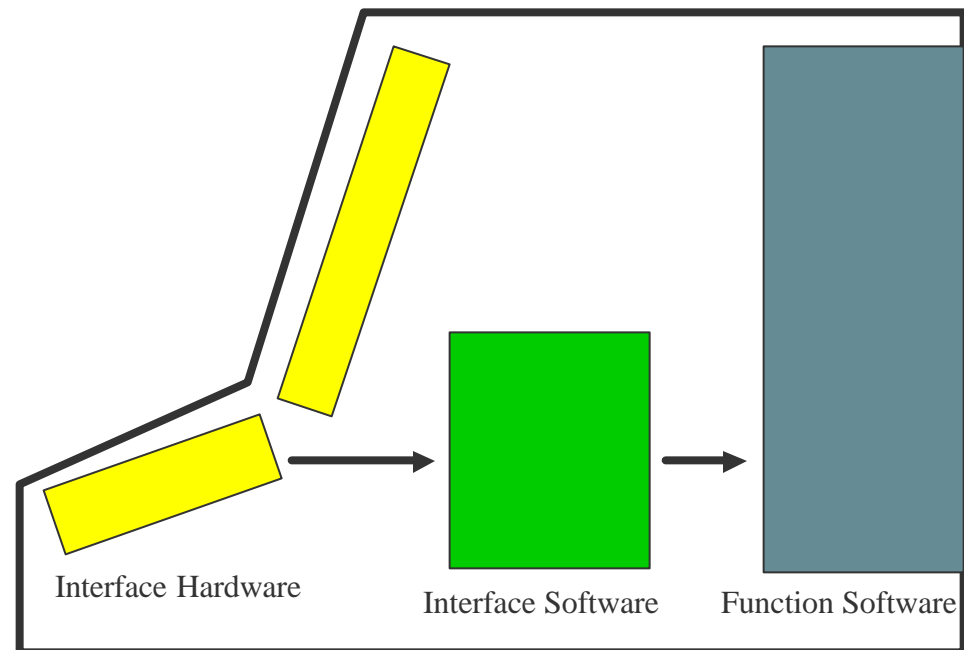
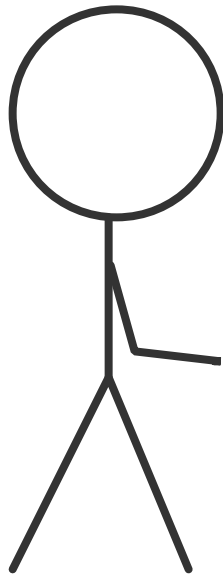
What to Do?

- Make STANDARD services and devices directly usable by people with a wide range of abilities
 - Best way to create access to most technologies
- Create standard extension hooks for services and devices
 - Alternative interface
 - Enhanced capability
- Use new technologies for adaptive solutions where existing solutions don't cope

The Problem

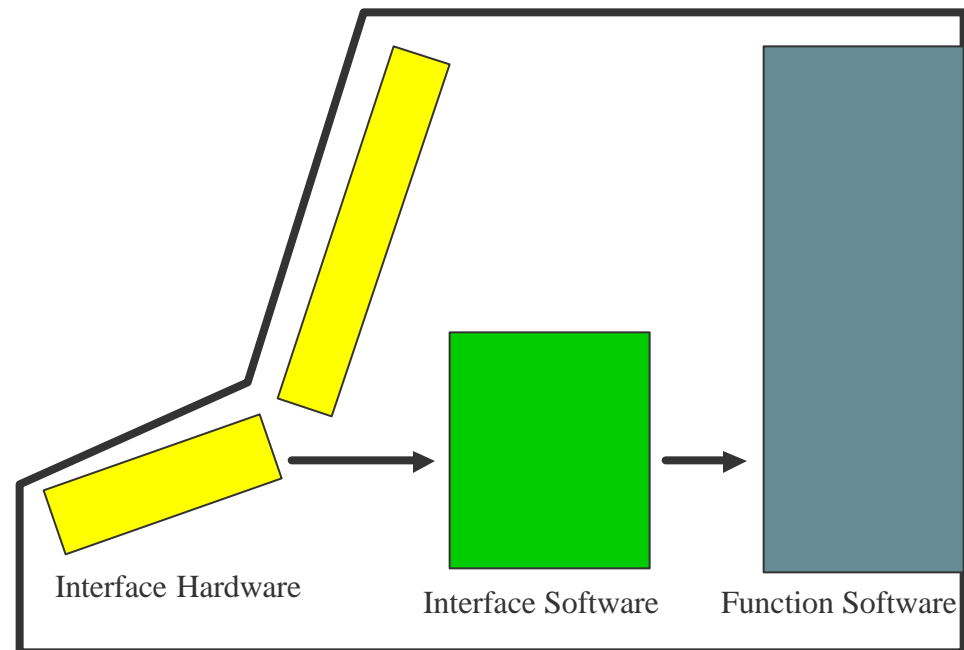
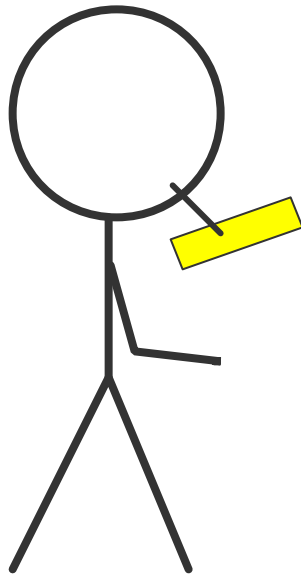
- People are faced with a product or service
 - they cannot operate
 - in a place where they cannot adapt or modify the product to meet their needs
 - e.g. Kiosk, ATM, shared workstation, immersive environment
- People with disabilities cannot get the needed efficiency through the interface that is built into the product
 - e.g. Workstation

Person cannot use interface on product (Scenario #1)



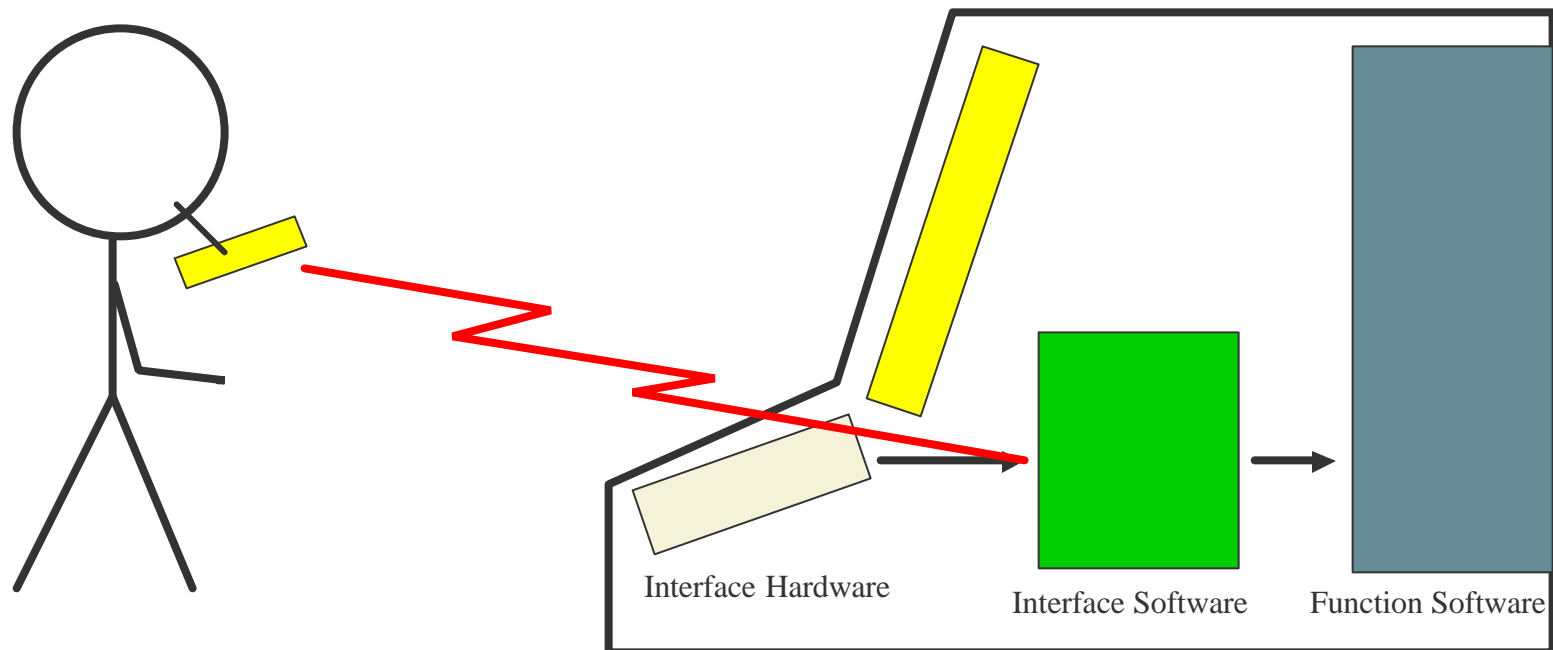
Person cannot use interface on product (Scenario #1)

- ... but has alternative keyboard they can use

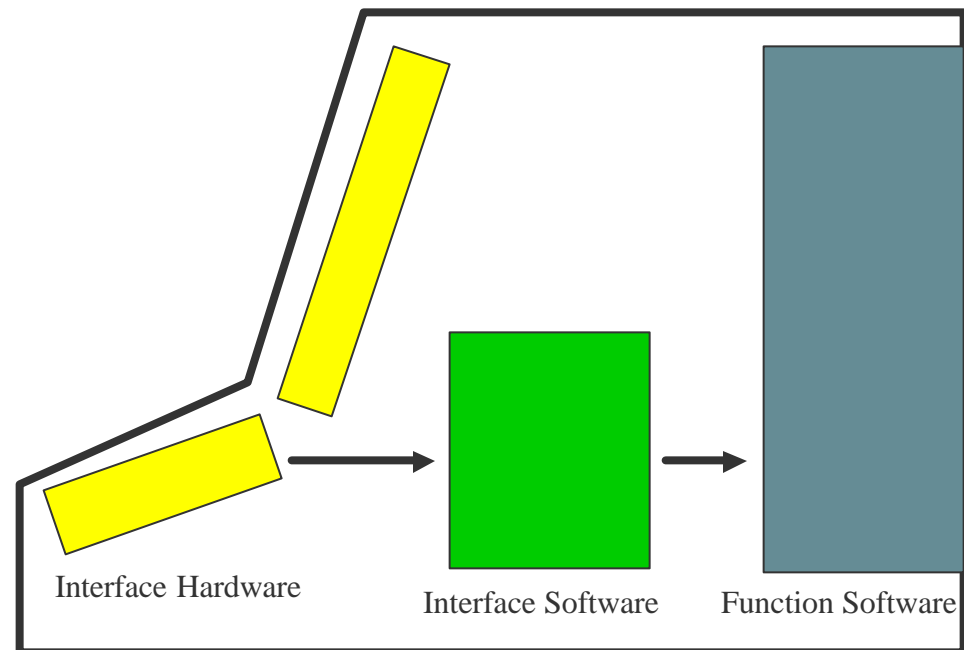
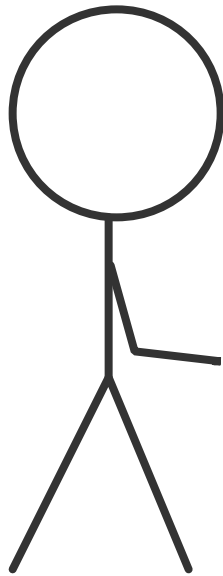


Person cannot use interface on product (Scenario #1)

- ... but has alternative keyboard they can use
- V2- Effort #1 is aimed at giving them a way to use it instead of the keyboard on the product

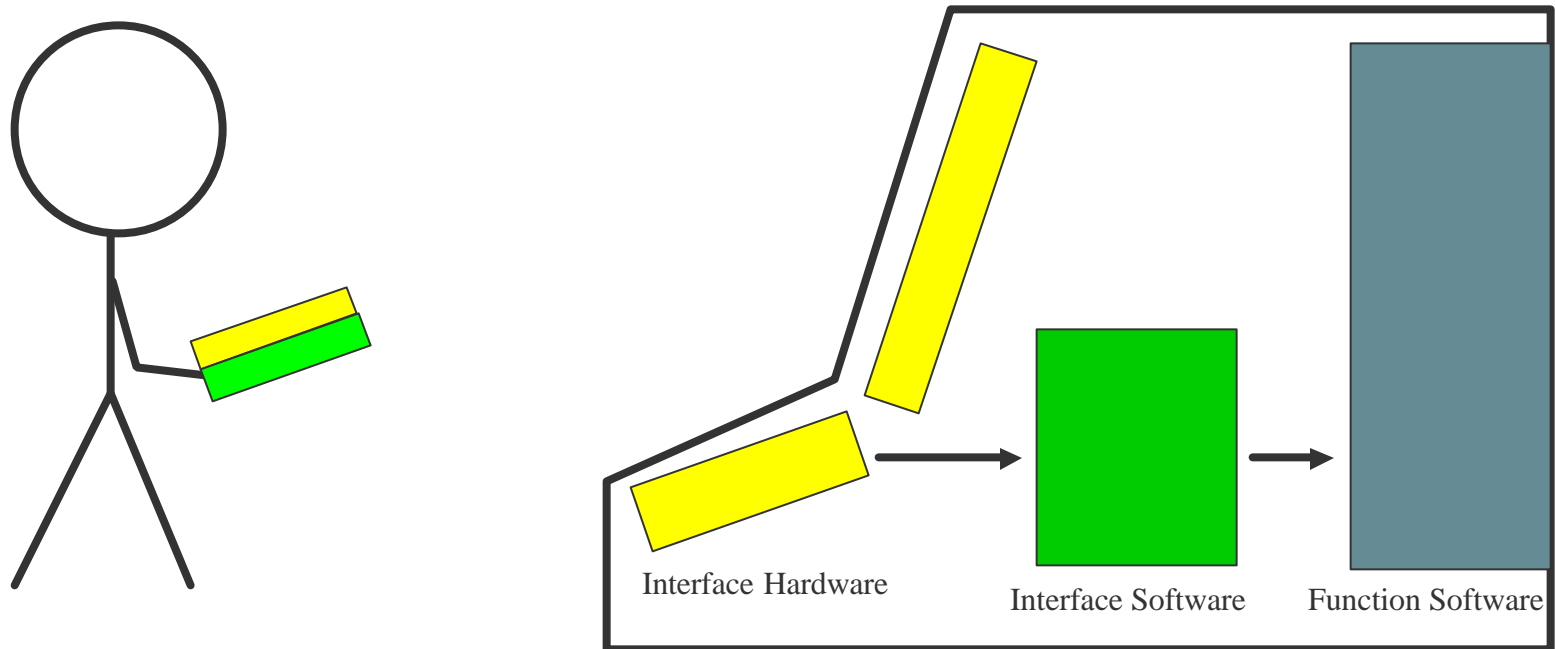


Person cannot use interface on product (Scenario #2)



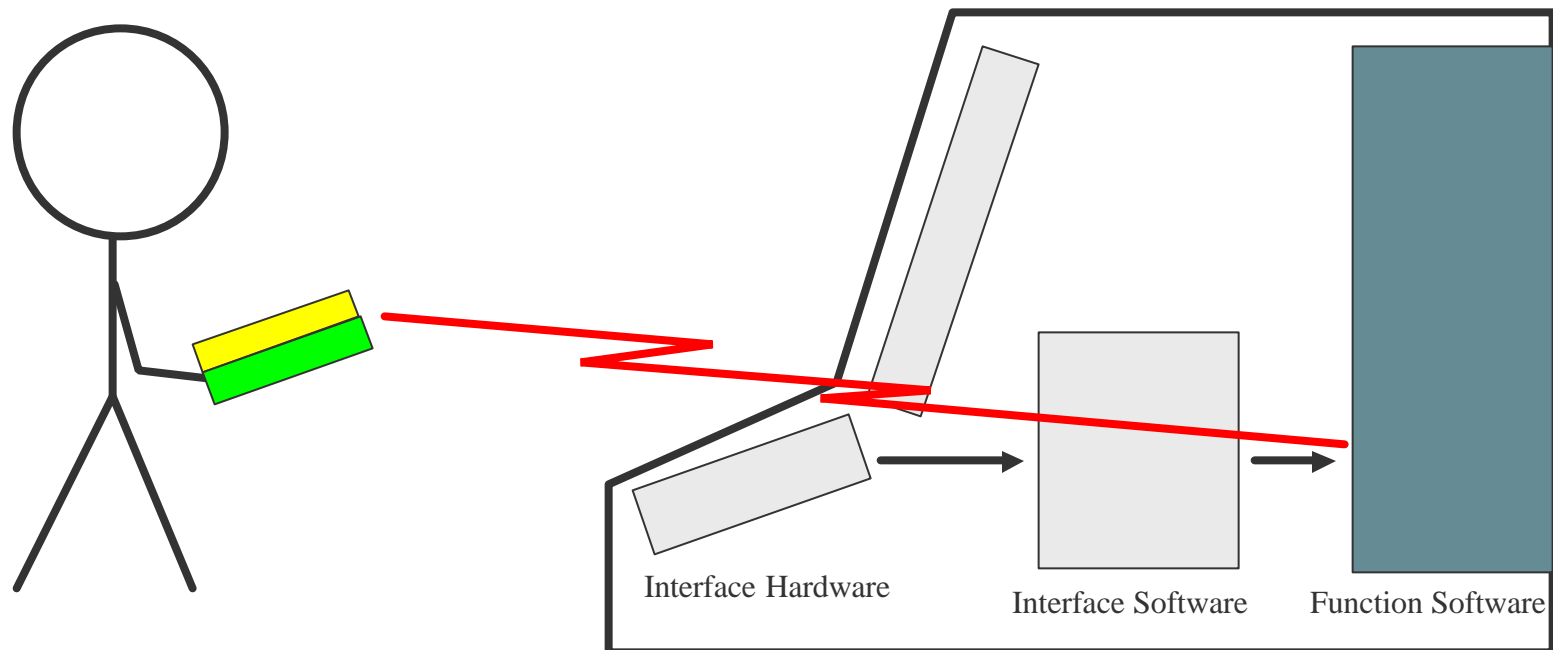
Person cannot use interface on product (Scenario #2)

- ... but has a remote console device



Person cannot use interface on product (Scenario #2)

- ... but has a remote console device
- V2- Effort #2 is aimed at giving them a way to use it instead of the entire interface on the product

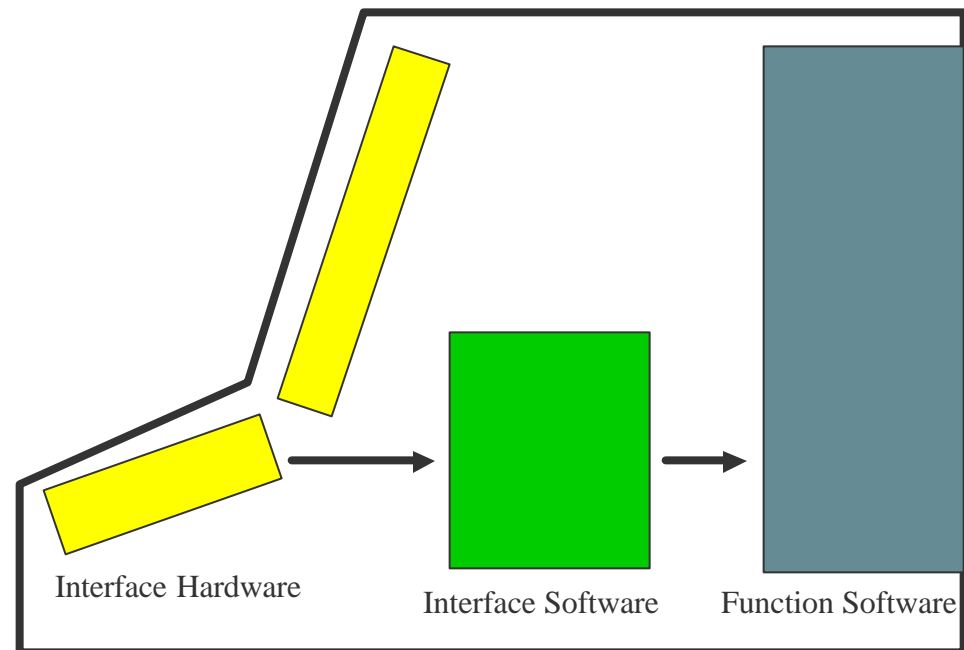
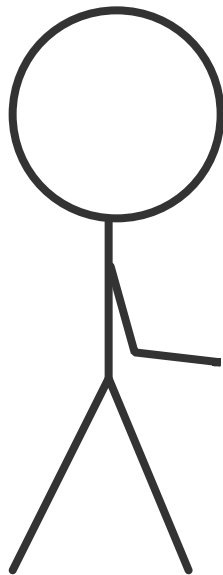


BrailleNote

One Possible Remote Console Device

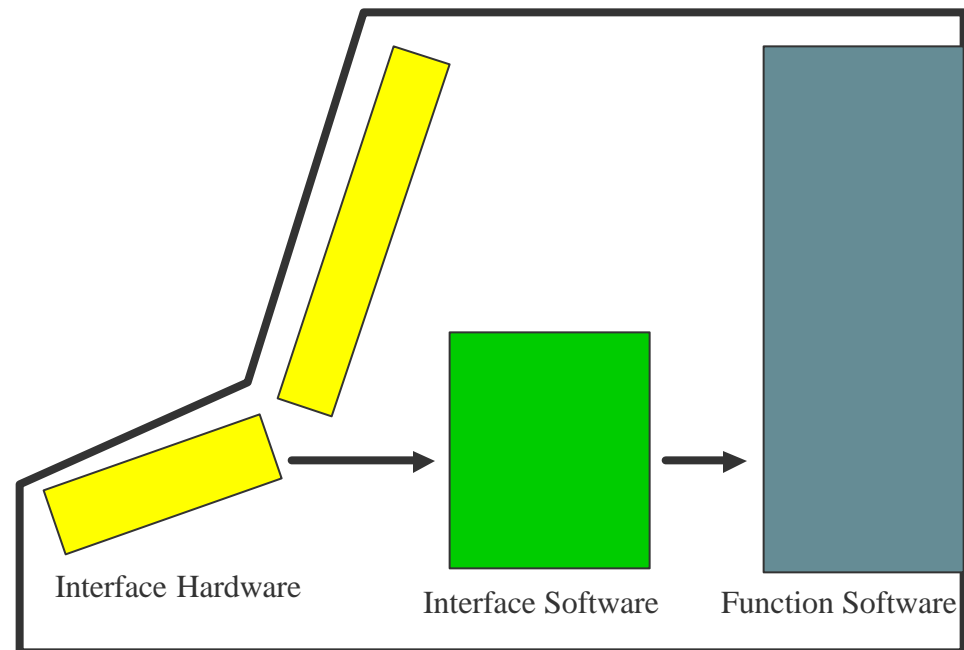
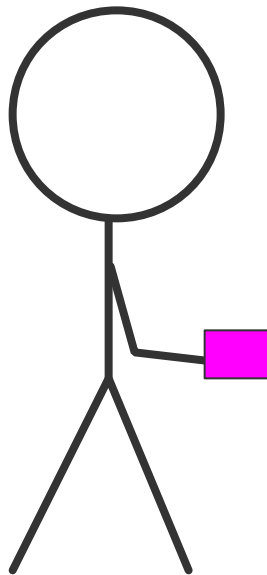


Person cannot use interface on product (Scenario #3)



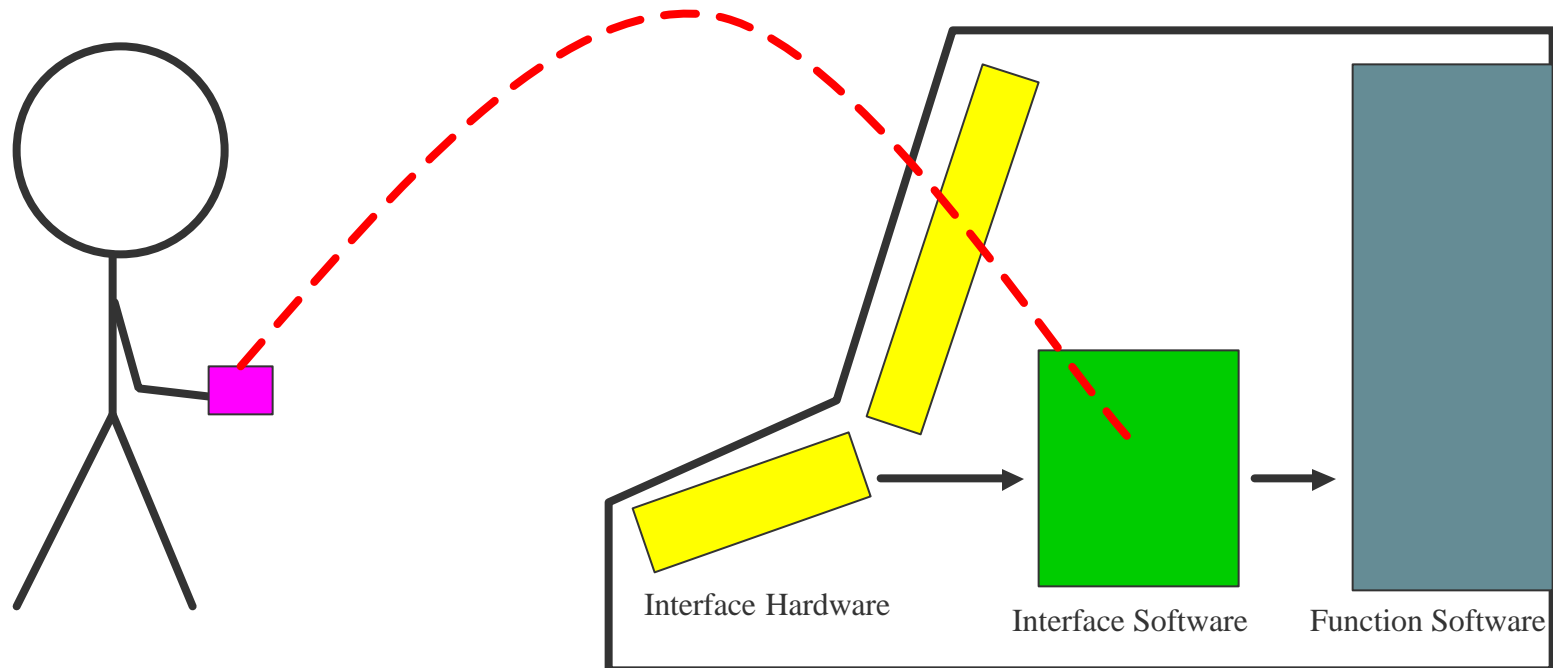
Person cannot use interface on product (Scenario #3)

- ... but has a card or device that describes their abilities
OR their preferences

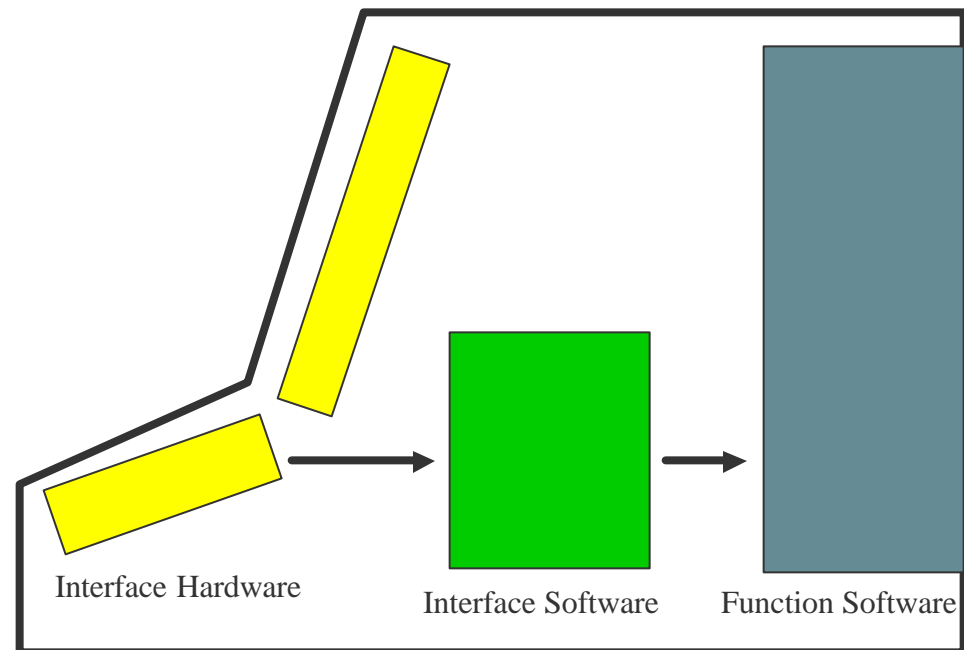
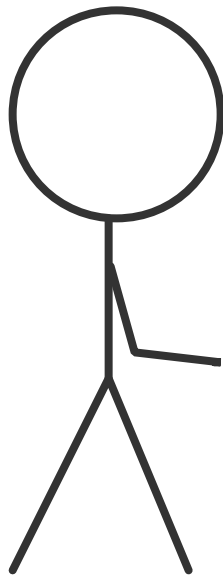


Person cannot use interface on product (Scenario #3)

- ... but has a card or device that describes their abilities OR their preferences
- V2- Effort #3 is aimed at giving them a way to send their information to the product – so that the product can adapt its interface to meet their needs

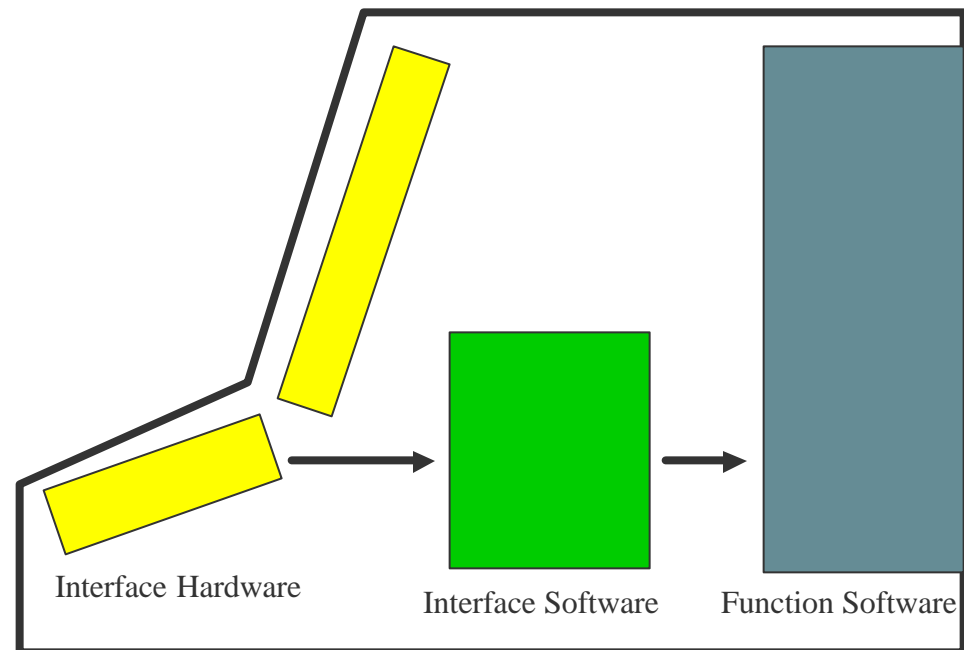
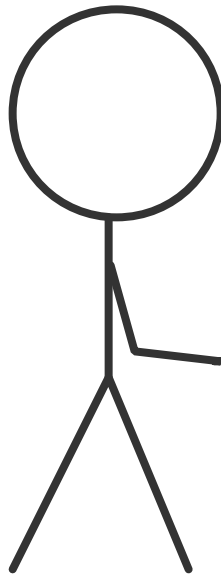


Person cannot use interface on product (Scenario #4)



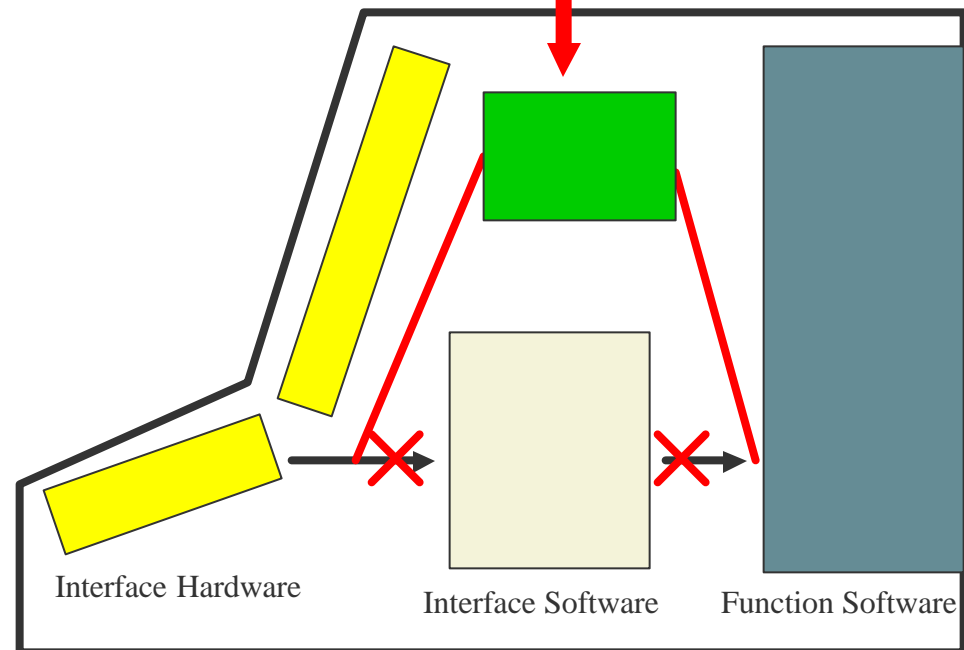
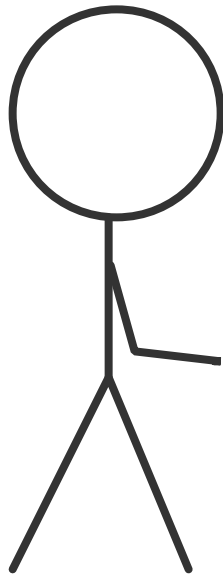
Person cannot use interface on product (Scenario #4)

- ... but they could if new interface software could be located or created for them and loaded into the product



Person cannot use interface on product (Scenario #4)

- ... but they could if new interface software could be located or created for them and loaded into the product
- V2 – Effort #4 is aimed at providing ways for alternative software to be called up and downloaded into a product



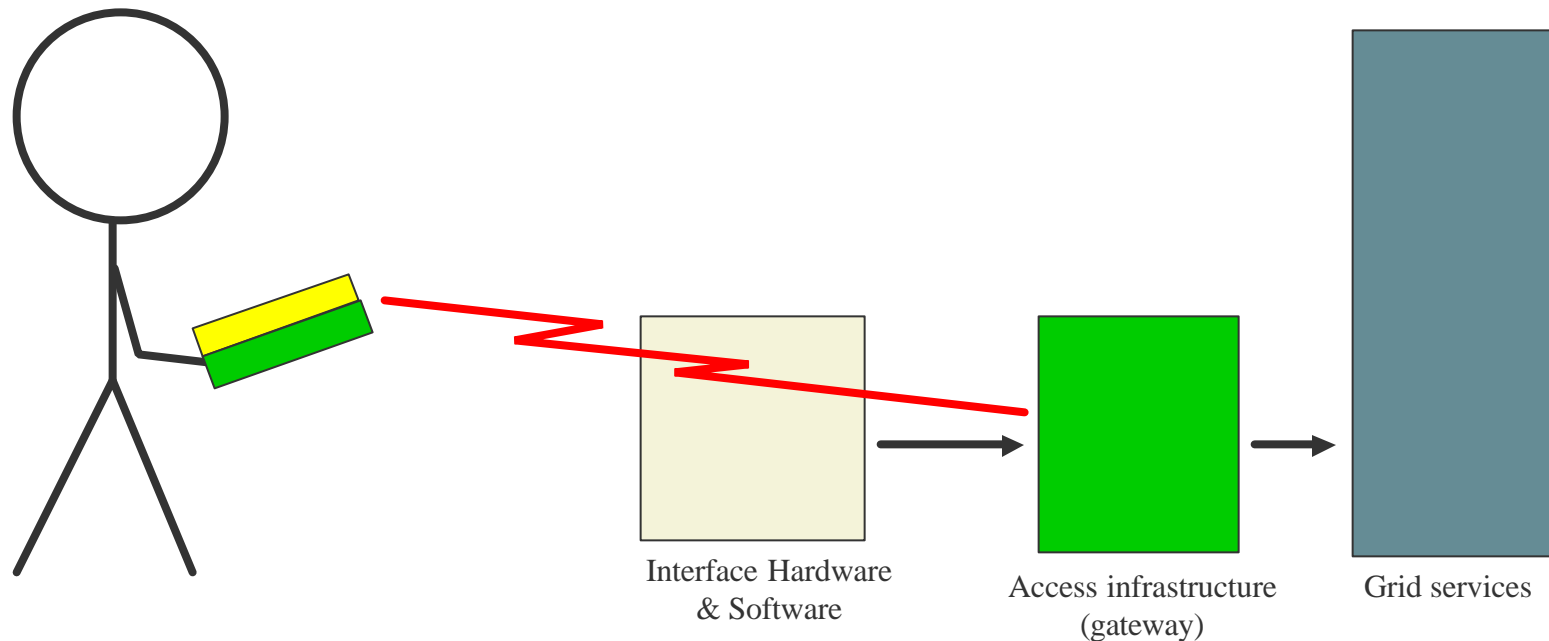
Considerations for the Access Grid

- Important to think about when constructing the Grid – so that it will support such standards.
- Provides an interesting prototype for both scalable and interchangeable user interfaces.
- Could provide key strategies for common portal work.

Considerations

Person cannot be present at the “default” access point

- ... but has a remote device (e.g. cell phone, pager, handheld)
- Scenario A: Remote Job Control
- Scenario B: Linking people with remote devices to an AG session
- More?



Thank you!